BRUHATH BANGALURU MAHANAGARA PALIKE
YELAHANKA ZONE

Name of the work : Annual Maintenance Of Electrical Equipments and Maintenance of Crematorium at Mediagrahara Lakshnipura in ward no11

AEE/ELE/ESG/ /16-17

Est.Cost:16.00 Lakhs

Sl No	Description	Unit	Qty	Rate	Amount
1	Licenced electrician wiremen fitter with tools (Skilled) Rs.13365/Person/Month. Rs.13365*12=1,60,380/Person/Year. KAE71LWA 2015 Dated 04-08-2016	Per Person	1	160380.00	160380.00
2	a).Helper (Electrical) (Semi-Skilled) Rs.11011/Person/Month. Rs.11011*12=132132/Person/Year. KAE71LWA 2015 Dated 04-08-2016	Per Person	1	132132.00	132132.00
3	a).Sweeper (Unskilled) Rs.11011/Person/Month. Rs.11011*12=132132/Person/Year. KAE71LWA 2015 Dated 04-08-2016	Per Person	1	132132.00	132132.00
4	Gurkha Watchman (Unskilled) Rs.11011/Person/Month. Rs.11011*12=132132/Person/Year. KAE71LWA 2015 Dated 04-08-2016	Per Person	1	132132.00	132132.00
5	Material components per day a)soap oil	P/Ltrs	100	15.00	1500.00
	b)henyl	P/Ltrs	150	70.00	10500.00
	c)Air Freshner cakes	Each	200	10.00	2000.00
	d)Room Freshner	P/Ltrs	100	157.50	15750.00
	e)Checks cloth	Doz	100	50.00	5000.00
	f)Dust cloths	Doz	50	50.00	2500.00
	g)Mop cloth	Each	36	70.00	2520.00
	h)Soft broom	Each	36	20.00	720.00
	i)Hard broom	Each	36	8.00	288.00
	j)Road brush	Each	12	110.00	1320.00
	k)Urinal cakes	Each	150	8.00	1200.00
	l)HCL	P/Ltrs	36	8.00	288.00
6	Supplaying & Fixing of Body laying with MCL 150X300X600mm	Each	8	11600.00	92800.00
7	Supplying and fixing of heating element made out of nickel chromium 8/20, 8 SWG composition wire with SS 310, 450 x 10 mm dia. with one side threaded terminal rod duly welded, coil length 2690 mm, coil dia., 25 mm, weight of the coil 4.5 kg, coil of 0 to 25 mm ID 15 mm pitch to 8 to 10 mm (inclusive of KST, ST and CESS etc.	Each	6	16950.00	101700.00
8	Supplaying & Fixing of nickel chromium Heating coils 4.5 KW suitable for Verticle mounting system in Electrical Furnace	Each	3	37000.00	111000.00
9	Annual Maintenance of 180 KVA D.G. Set Existing A.M.C. including of labour charges only for replacing the spare parts and periodically checkup of D.G. AMF panel (Without operator)	Each	1	44000.00	44000.00

10	Supplying & Changing of B Check Kit for Engine.	Nos	2	3150.00	6300.00
11	Supplying & Changing of Alternator AVR.(Automatic Voltage Regul	Nos	1	9600.00	9600.00
12	Supplying & Changing of Alternator Rectifier	Nos	1	2800.00	2800.00
13	Supplying & Changing of Dynamo repair Kit such as Corbons, Bearings & Diode Etc,.	Nos	1	3100.00	3100.00
14	Supplying & Changing of Batery terminals	Nos	2	268.00	536.00
15	Supplying & Fixing of Air filter	Nos	1	2880.00	2880.00
16	Supplying & Changing of Radiator Fly wheel gear	Nos	1	3200.00	3200.00
17 45/ 6.8	Supplying of Switch disconnector fuse unit (TPN) HRC type (but without HRC fuses). With AC-23A duty and as per IS-13947. 2) 125Amps	Each	3	5060.00	15180.00
18 45/ 6.10	Supplying and fixing HRC fuse link on existing switch fuse base with watt loss as per IS-13703. 3) 125Amps	Each	3	358.00	1074.00
19	Supplying & Changing of Cylinder head caliberation.(3 Nos)	Set	1	2880.00	2880.00
20	Supplying & Changing of Radiotor hose Kit (3 Nos)	Set	1	1920.00	1920.00
21	Supplying & Changing of Pump gasket	Nos	1	1440.00	1440.00
22	Supplying & Changing of Top cover gasket.	Nos	1	1920.00	1920.00
23	Servicing & cleaning of Scrubber, Scrubber duct Exhaust Blower & Duct Furnace to Chimny and cleaning of chimny (6 monts once)	P/Set	4	10000.00	40000.00
24	Accost - 50 Grade	Bag	4	1700.00	6800.00
25	Fire crate super	Bag	2	2750.00	5500.00
26	Thermotex	Bag	2	3100.00	6200.00
27	Fire blanket : 128 Grade	Each	3	3150.00	9450.00
28	IS 8 Standard Brick : Size : 9x4.5x3	Each	102	70.00	7140.00
29 XXXII /872	Plastic buckets 20 L capacity PWD Civil SR 2013-14	No	6	120.00	720.00
30 XXXII /882	Plastic Mugs PWD Civil SR 2013-14	No	10	30.00	300.00
31 5/2.1.3	Point wiring using Copper wire with switch Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2 X1.5Sq.mm Cable confirming to the GTP, with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. GROUP A Long point above 6Mtr upto 10Mtr from tapping point to out let via switch	Mtr	10	363.00	3630.00
32 2.6.1	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper conductor single core wire in open or concealed system of wiring as per IS-694:1990 & confirming to GTP of GROUP -A.1.5 sqmm	Rmt	95	18.60	1767.00
33 2.6.4	4)4 sqmm	P/Mtr	95	42.70	4056.50

34 3.15.A	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board. GROUP A				
35 3.15..1	6Amps SP Switch	Nos	20	35.00	700.00
36 3.15..4	6Amps 3 way 5 pin Socket	Nos	10	53.00	530.00
37 3.15.9	16 Amps SP switch	No	5.00	89.00	445.00
38 3.15.10	16 Amps 3 way 5 pin socket	No	5.00	94.00	470.00
39 3.7.4	Stepped Fan Regulator.	Each	5.00	286.00	1430.00
40 25/4.29.2	LED Indoor Supplying of 2' feet - LED PVC Square Batten ..W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50Hz & Power factor >0.9 along with CE approved drivers. 5 years Warranty against any manufacturing defect working under standard electrical conditionLED light fighting 4' - 28 watts	Nos	20	1774.00	35480.00
41 46/6.13 A.2	Supplying and fixing Moulded Case Circuit Breaker (MCCB) Over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of overload and short circuit with thermal Magnetic/Micro processed release and Earth Fault as per IS-13947. (Icu=Ics). FOUR POLE 6) 125-160Amps 25kA.	Each	3	5406.00	16218.00
42 46/6.14	Supplying and fixing of Shunt trip suitable for MCCB.CBCT.	Each	1	1486.00	1486.00
43 88/ 12.3	Supplying, installaion, testing & commis-sioning of 12Volts.. AH batteries in poly propylene container for D.G Sets low maintenance batteries. 4) 150 AH, Acid batteries.	Each	2	20600.00	41200.00
44 44/6.7	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 4) 100 Amps	Each	6	360.00	2160.00
	5) 200 Amps	Each	6	732.00	4392.00
45 78/9.2	Supplying of 1440rpm heavy duty exhaust fan with bracket blades suitable to operate on 230V 50Hz, AC Supply complete. 2) 15" Sweep (450mm)	Each	3	4394.00	13182.00
46 109/17.11	Fixing one exhaust fan after making a suitable nitch in the wall and finishing with cement mortar and colouring to match the existing wall or brackets, with bolts and nuts and a 5 amps, ceiling rose with sufficient length of 23 / 0.0076 inch PVC insulated twin core wire of approved make with wire mesh and wooden frame.	Each	3	680.00	2040.00

47 76/ 8.15	Supplying and fixing of Alkathine tube of 25 mm dia as per standard technical specification	Mtrs	4	414.00	1656.00
48 66/13	Supplying and installation of RUBBER MAT 1 mt X 2mt 10 mm thick. PWD Electrical SR 2010-11	Each	2	1105.00	2210.00
49 66/12	Supplying and fixing of DANGER/NO ADMISSION/NO SMOKING board made out of MS sheet metal with two coats of non corrosive enameled paint. PWD Electrical SR 2007-08	Each	10	75.00	750.00
50 66/8	Supplying of Rubber HAND GLOVES of Electrical quality to 22KV. PWD Electrical SR 2007-08	Pair	4	170.00	680.00
51 66/10	Supplying of Safty MASK, PWD Electrical SR 2007-08	Each	4	64.00	256.00
52 48/6.36	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 220v A.C.50 Hz 12/24v D.C.	Each	6	442.00	2652.00
53 64/ 7.21	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes 11) 95 sq mm long barrel	Each	9	149.76	1347.84
	15) 240 sq mm long barrel	Each	7	478.92	3352.44
54 45/6.12	Supply and fixing of 4 pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947. 4) 5)160-200Amps	Each	6	15974.00	95844.00
	3) 60-70 amps	Each	3	4774.00	14322.00
55 47/6.16	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' type curve, indicator ON/OFF, energy cross-3 with short circuit breaking capacity of 10K and Complete wiring as required confirming IEC 60898. 6) 40-63 Amps TPN	Each	5	1936.00	9680.00
	3) 5-32Amps DP	Each	8	849.00	6792.00
56 28/4.3 7.2	Supplying of LED Floodlight with .....W System Power consumption pressure die cast aluminum housing with powder coating with IP 65 protection. 1, 200-275V voltage with electronic Driver, PF>0.9, should meet ANSI 2G Vibration test, Compliance to UL/CE with Class I. System rating shall be 50K hrs. @ Lumen maintenance of 70%, system efficacy > 80lm/w. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer.LED Floodlight 90W	Nos	2	14646.00	29292.00
57 61/7.65	Supplying of 1.1KV grade Aerial Bunched Cable Stranded & Compacted Aluminum Phase Conductor, and Stranded Messenger Conductor with all aluminum Alloy, Phase Conductor is insulated with XLPE Compound, insulated Messenger with specified IS-14255:1995 & confirming to GTP of GROUP-A. 2 X 16 + 1 X 25 SQ.MM	Mtrs	350	92.00	32200.00
58 Bes SR	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR	Mtrs	350	10.30	3605.00

59 26.4.3 5	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part II.LED Streetlight 65watts	Nos	10	18720.00	187200.00
61	Misscellenious charges	L/S			172.22
	TOTAL				**1600000.00**

CERTIFICATE

1. The place was inspected and work is essential
2. The place comes under BBMP limits.
3. The estimated prepared based on the PWD Electrical SR's 2010-11, 2014-15 Rates, PWD Civil 2013-14 and also approved rates .

Junior Engineer (Elec)
Yel Dvn.BBMP

Asst. Exe.Engineer (Elec)
Yel Dvn.BBMP

Executive Engineer (Elec)
Yel Dvn.BBMP

Administrative Sanction for Rs. 16.00 Lakhs
Sixteen Lakhs only.
is accorded under P0227 M2R Electrical Crematorium.
Registered as EE No. EE/ELE/Y2/AS/08/16-17 dt:-20-2-17
to conditions contained in enclosed memo
No. P00-522,531
Executive Engineer

TECHNICALLY SANCTIONED FOR Rs. 16.00 Lakhs
Rupees Sixteen Lakhs only.
Under P0227, M2R to Electrical Crematorium
Registered as EE ( ) No. EE/ELE/Y2/09/16-17
Subject to conditions contained in
enclosed memo EE ( ) No. EE/ELE/Y2/AS/08/16-17
Dt. 20-2-17 Estimate A/ Sanctioned
P00-522,531 No. SW00-08/16-17
Dated 20-2-17 Rs. 16.00 Lakhs
Executive Engineer